IGS Tracking Station GOPE in 2001

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Activities at the Station GOPE until 2001

The IGS station GOPE has been operated at the Geodetic Observatory Pecný since 1995. Since the beginning the daily files of 30-second data and since November 17, 1998 also hourly files have been delivered. On November 4, 1999 the original receiver Trimble 4000 SSE with Trimble 4000ST L1/L2 antenna had been replaced by the Ashtech Z18 receiver and Ashtech Choke Ring GG antenna with a snow radome and the station joined the IGEX (International GLONASS Experiment) project later continued as IGLOS-PP. Since that time the station has been providing daily and hourly files of both GPS and GLONASS 30-second data.

Participation in the LEO Project

In 2000 the station GOPE was accepted as a terrestrial tracking station for the Low-Earth Orbiter (LEO) Pilot Project. Among a number of files with different data intervals 15-minute files of 1-second data have been produced since January 2001. Since June 20, 2001 the data have been provided in compressed CompactRINEX format in agreement with the resolutions of the IGS LEO Workshop held in GFZ Potsdam in February 2001.

The primary program used on the on-site recording computer is the Geodetic Base Station Software of Magellan Corporation/Ashtech Precision Products which produces both daily and hourly files. The routine of forming 15-minute files employs an instant data record on the disk immediately after they are received on the serial port. The receiver was switched to 1-second download and a software was created to take each 15 minutes required data and to transmit them through established data flow paths to the CDDIS Global Data Center.

Improved Signal Reception

An area surrounding the observing site was cleared of trees to improve the horizon. This resulted in an improved signal reception along with a significant data gain.